



Lesson Module 2:
Strength Training—Savings and Interest



Module 2—Overview

In football, strength is something that you can't develop all at once. Players need a consistent and focused work-out regiment to reach their peak performance. And even then, it takes a long time. As a matter of fact, top players never let up on their strength training.

In finances, a consistent and focused savings plan will allow you to develop your financial strength. Saving small amounts over a long period of time is much more effective than trying to save all at once. The reason for this is interest.

Interest is the money you earn on savings. In time, the interest you earn becomes a part of your savings, and earns more interest. It creates a very powerful financial cycle...the more interest you earn, the more money you have saved, and the more interest you earn. This is what people mean when they say, "Let your money work for you." Unlike your muscles, you could get to a point when your savings bulks up without you doing anything.

Goals

- Understand the different savings options that can increase the value of money.
- Perform activities associated with calculating interest rates and future values of money.

Objectives

- Consider alternative ways to help money grow through savings.
- Apply simple math concepts to determine the future value of money.



Module 2—Teaching Notes

Savings is the most important tool in shaping your financial future. Without it, you're just living day-to-day, unprepared for emergencies, unempowered to make larger purchases without going into debt, and unfunded for retirement.

Goals help you direct and encourage savings. How much do you want to save by when? What's your incentive? A goal answers these questions.

Reaching a goal takes commitment, discipline and delayed gratification...you can't have everything right now. There are several strategies to saving:

- From each paycheck or allowance, deposit a set amount or percentage into your savings account before spending money on anything else.
- At the end of the day, put all your change in a savings container. Once a month, deposit the money in a savings account.
- Whenever you get unexpected money, put a portion of it into savings.

Savings Accounts are a great way to start saving money. They don't offer a high return, but they do offer minimal interest with very little, if any, risk. Money Market deposit accounts are a type of savings that, on exchange for keeping higher balances, offer easy access to your money and higher interest rates. Certificates of Deposit (CD) pay higher interest rates in exchange for leaving money deposited, untouched, for a specified period of time.

The **Rule of 72** estimates how quickly your money can grow. Just divide 72 by the interest rate you are earning. The result is the number of years until your money doubles. Or, divide 72 by the number of years in which you want your money to double. The result is the interest rate you need to earn.

Investing is different from savings in that there is a degree of risk in investing, but there is a change of greater return on your investment. Some common investment tools are: bonds, mutual funds, stocks, real estate and retirement plans.



Module 2–Discussion

Part of the power of interest rates lies in compounding. Here is a small-scale illustration of how interest, compounded just once a year, can earn more than uncompounded interest.

The future of \$1.00:

After one year at 5% interest:

$$\begin{aligned} \$1.00 \times .05 &= 0.05 \\ \$1.00 + .05 &= \mathbf{\$1.05} \end{aligned}$$

After two years at 5% interest:

$$\begin{aligned} \$1.05 \text{ (year 1 principle + interest)} \times .05 &= 0.0525 \text{ (round down to .05)} \\ \$1.05 + .05 &= \mathbf{\$1.10} \end{aligned}$$

After three years at 5% interest:

$$\begin{aligned} \$1.10 \text{ (year 2 principle + interest)} \times .05 &= 0.055 \text{ (round up to .06)} \\ \$1.10 + .06 &= \$1.16 \end{aligned}$$

Earning 16 cents isn't all that exciting. But let's look at the power of regular saving, earning interest, over time.

The future of \$50 a month

$$\$50 \times 12 \text{ months} = \$600$$

But there is also interest.

Keep that up for 5 years and you'll have saved:

$$\begin{aligned} \$50 \times 12 \text{ months} \times 5 \text{ years} &= \$3000 \\ \text{Plus interest} &= \$391 \\ \$3000 + \$391 &= \mathbf{\$3,391!} \end{aligned}$$

After 10 years: \$7,718

After 20 years: \$20,290

After 30 years: \$40,769

At this point the interest earned is more than the amount deposited.



Module 2–Activity

How does an interest rate affect your earning power?

It seems simple, the higher the interest rate, the more money you earn on your investments, right? Yes, but the higher the interest rate, the more interest you earn on the interest you've earned. So the better and better it gets.

This should make it clearer:

If you start with \$1000 in savings, how much interest can you earn? Fill out the chart below, specifying how much interest you would earn over time on \$1000, with a variety of interest rates.

	5%	8%	10%
1 year			
3 years			
5 years			
10 years			

Even though 10% interest is twice as much as 5% interest, over time, you'd earn more than twice as much on your money. That's because your interest will earn interest!